

## **DRAFT MEMORANDUM**

**To:** Incinerator Work Group  
**From:** Subteam 4 (Metals-related incineration)  
**Date:** March 25, 1998  
**Subject:** Scrap Metal Recovery Units Recommendation

### **Recommendation**

Scrap metal recovery units are specifically excluded from the definition of solid waste incineration unit in Section 129. Certain types of scrap metal recovery units (Pb and Al) are already being addressed under Section 112 MACT rulemakings. In addition, at least in the cases of copper wire and steel, mechanical processes such as chopping, shredding, and classifying are replacing combustion as the recovery technique. The Incinerator Work Group recommends that all scrap metal recovery units be referred to EPA for MACT rulemakings as deemed appropriate by the EPA and not receive further consideration in the ICCR process.

### **Background**

Subteam 4 has identified a number of different types of scrap metal recovery units in the ICCR database. The metals recovered in the listed units include copper, lead, aluminum, ferrous, and precious metals. Some smelt or sweat out the metal from the unwanted combustible or noncombustible matrix, others simply burn off the combustible insulation or coatings. In many cases, these units are area sources of HAP emissions.

The secondary environmental benefits of scrap metal recovery are not inconsistent with EPA's statements in support of recycling and overall environmental benefits. In 1993, according to the Institute of Scrap Recycling Industries, Inc., trade association members handled 53 million tons of scrap iron and steel, 3.5 million tons of scrap aluminum, 1.4 million tons of scrap copper, 1 million tons of scrap lead, 0.7 million tons of scrap stainless steel, and 0.3 million tons of scrap zinc. The energy savings of recycling scrap metal over primary metal production from ore are not negligible: from 74 percent for iron and steel to 95 percent for aluminum. Clearly regulation of these types of sources should take a life-cycle view rather than focus solely on the combustion that may be involved.

### **Section Applicability**

The following addresses how scrap metal recovery units are considered under the various regulations.

#### Applicability of Section 129 Requirements

Section 129 of the Act applies to "solid waste combustion". Subteam 4 believes that the combustible materials that are fed to scrap metal recovery units may be classified as solid wastes. However, Section 129(g)(1) contains a number of explicit exclusions from the definition of "Solid

Waste Incineration Unit” and reads, in part, “...**The term ‘solid waste incineration unit’ does not include (A) materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals, (B)...**” [bolding added] 42 U.S.C.A. §7429(g)(1). Therefore, scrap metal recovery units are not solid waste incineration units, and Section 129 does not apply.

#### Applicability of Section 112 Requirements

As mentioned above, secondary lead and secondary aluminum production MACT standards have been or are being promulgated. Secondary lead smelters produce lead metal from scrap and provide the primary means for recycling lead-acid automotive batteries. The secondary lead smelter MACT standard was promulgated on May 31, 1994, and covers area as well as major sources of HAPs. The secondary aluminum production MACT standard is expected to be promulgated in 1998. It will cover major HAP sources only.

According to the Section 112(c)(6) emission inventory, 75% of secondary copper smelters are considered to be area sources of HAPs. Copper recovery units as well as precious metal recovery units are recommended to EPA for consideration for MACT development outside the ICCR process.

#### **Conclusion**

Scrap metal recovery units are excluded from Section 129. Two types of scrap metal recovery units (Pb and Al) are currently listed in Section 112 as source categories for MACT development. Another type (Cu) has been inventoried and may be addressed in a non-ICCR rulemaking. Since EPA has built expertise outside the ICCR process in dealing with secondary metal recovery units, the IWG recommends that the ICCR give secondary metal recovery units no further consideration.